Patent claims

- 1. Process for preparing trichlorosilane by reacting silicon with silicon tetrachloride, hydrogen and optionally hydrogen chloride using catalysts, characterized in that silicon is intensively mixed with the catalyst before the reaction.
- 2. Process according to Claim 1, characterized in that the mixing of the silicon with the catalyst takes place in a mixer with rotating mixing tools.

3. Process according to 60 minutes

5

3. Process according to Claim 1 or 2, characterized in that the mixing time is 1 to 60 minutes, preferably 5 to 20 minutes.

- 4. Process according to Claims 1 to 3, characterized in that the catalyst used is a copper catalyst or an iron catalyst
- 5. Process according to Claim 4, characterized in that the catalyst used is a copper oxide catalyst or an iron oxide catalyst.

20

25

The Art Chin Golf Will Me 11

15

- 6. Process according to Claims 1 to 5, characterized in that the mixing of silicon and catalyst takes place at a temperature of from 100 to 400°C, preferably at 130 to 350°C.
- 7. Process according to Claims 1 to 6, characterized in that the mixing of silicon and catalyst takes place in the presence of hydrogen.
- 8. Process according to at least one of Claims 1 to 7, characterized in that the reaction is carried out at a pressure of from 1 to 40 bar (absolute).
- 9. Process according to at least one of Claims 1 to 8, characterized in that the reaction is carried out at temperatures of from 400 to 800°C.

50 P 2 10.

Process for preparing silvane and/or ultrapure silicon, characterized in that the starting material is trichlorosilane obtained according to at least one of Claims 1 to 9.